

2-9-2017

Minutes, Crummer Graduate School of Business Faculty Meeting, Thursday, February 9, 2017

Crummer Graduate School of Business Faculty

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**Roy E. Crummer Graduate School of Business
Rollins College
Crummer Faculty Meeting Agenda**

**February 9th, 2017
Room 108
11:30am**

Approval of Minutes.....Greg Marshall
Management and Executive Advisory Committee.....Greg Marshall
Curriculum Committee Update.....Halil Kiyamaz
AACSB UpdateHalil Kiyamaz
Other Business.....Greg Marshall
Meeting Adjourned.....Greg Marshall

**Next meeting
March 14th
Faculty and Sr. Staff
Room 108
11:30 am – 1:00pm
Lunch will be served**

**Roy E. Crummer Graduate School of Business
Rollins College
Crummer Faculty Meeting Minutes**

**February 9th, 2017
Room 108
11:30am**

Those Present: Henrique Correa, Bob Ford, Kim Jentsch, Jim Johnson, Mark Johnston, Halil Kiyamaz, Tracy Kizer, Greg Marshall, Pete McAlindon, Craig McAllaster, Kyle Meyer, Tim Ozcan, Bill Seyfried, Koray Simsek, Clay Singleton, Greg Turkanik, Keith Whittingham, Keenan Yoho, Lynda Boyce, Pam Clark, Deborah Crown, and Steve Gauthier

Approval of Minutes.....Greg Marshall

Approved by Faculty

Management and Executive Advisory Committee.....Greg Marshall

- We now have formal advisory board for M&EE
- Keith to chair
 - Pete McAlindon - Member
 - Margaret Linnane –Member

Curriculum Committee Update.....Halil Kiyamaz

- Elective courses proposed under modified MBA program must go through the Curriculum committee for approval
- Please provide your syllabus minimum two months before the start of your term.
- The following elective courses have been approved by the committee
- FIN611 – Approved by Faculty
- FIN612 - Approved by Faculty
- FIN609 – Approved by Faculty
- INTL 617 – Approved by Faculty
- Motion yes Mark Johnston, Second Keith Whittingham
- All courses are attached
- (Note from Keith)
- To list this class as Management a discussion needs to take place with the Management Faculty. Keith will draft a proposal to the Management Faculty
- Curriculum Mapping:
 - If you have not yet responded to the email Halil sent out about course mapping please do so as soon as possible.
 - There are some concerns about privacy with student information and grades.
 - The privacy issue was resolved by sending in the information without the student names included.

- AACSB UpdateHalil Kiyamaz
- Two days and counting!!
- The final schedule has been sent out
- General questions/discussion
 - Deborah attended the AACSB meeting. A member of the committee was there. One of the sessions was about the AOL. As a result a helpful discussion was able to happen with the member that will be assessing our AOL.
 - They have gone through the supplements
 - We have the CFO council that meet here every quarter.
 - Mike McCracken has alliances with other schools and is getting involved in AACSB as a guest speaker on best practices.
 - The team is coming very prepared
 - Know your topic and be yourself

Other Business.....Greg Marshall

- NESPRESSO team kickoff meeting has taken place. They are excited and ready to go to work. The members are: Michelle DeHernanded, Matt dickey,
- Austin Montgomery Lavonda
- The Leadership Center is ranked number one for a second year in a row
- We all wish Misty a speedy recovery after her surgery.
- Everyone teaching in the Summer term has received their schedule
 - Watch for book order requests from Lynda
- There are two of the old Policy classes that need to be taught to the P Class.
 - All professors who taught this class are gone. Greg Marshall will be teaching this class.

Meeting Adjourned.....Greg Marshall

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**Crummer Graduate School of Business
Rollins College**

Course Syllabus

[Skip to Class Schedule](#)

**FINANCIAL MODELING for the BUSINESS ENTERPRISE
FIN 611
2 Credit Hours**

Room 108

Office Location: Crummer Hall Room 106

Email Address:

Phone:

COURSE DESCRIPTION AND OBJECTIVES

Financial modeling is an essential part of sophisticated financial operations from corporations to investment banks to research firms. The skills you learn in this course will make you an attractive candidate for prestigious financial companies and enhance your opportunities within your current company. Take your time to develop elegant models as you work through the assignments in this course and you will have a portfolio of projects that will help you get interviews, jobs, and promotions. This course is a hands-on, application-oriented tour of financial models used in corporate finance, investment analysis, and portfolio management. You will make extensive use of Excel and learn Visual Basic—two of the financial modeler’s essential tools. Because most of these models were covered in basic corporate finance, we will only spend a little time on the financial theory behind each model. If the motivation behind each model is a bit obscure to you, I have provided a list of books and articles that you should consult to learn more about any models that are unfamiliar to you. As always, ask if you need help.

Risk

Financial models are designed either to determine an asset’s current or future value, or both. In all cases, the modeler needs to be concerned with helping the firm manage risk. While financial models can help quantify financial risk, they also create their own modeling risk.



Spectacular failures like Long Term Capital Management (subject of the book, *When Genius Failed: The Rise and Fall of Long-Term Capital Management*) were caused by model risk because the models failed to account for events that happened very rarely or had never happened (yet). The Economist (October 13, 2008, *When Fortune Frowned*, p. 12), referring to the financial crisis, wrote: “Wall Street’s fancy computer models, based on recent price histories, underestimated how much the innovation was pushing up house prices, underestimated the odds of a national house-price decline in America and so encouraged an unsustainable explosion of debt.” You can read more about model-related financial failures in *The Big Short: Inside the Doomsday Machine*, by Michael Lewis and in *The Black Swan* by Nicholas Taleb. One principle of financial modeling is that the model cannot foretell the

future nor will it be right under all circumstances—expected or unexpected. The best you can hope for is that your models help you make informed judgments.

Managing risk involves three teams, each with its own players. One team wants to avoid risk—these participants are the hedgers. Another team is willing to take on risk—they are the speculators. The financial modeling team occupies the middle ground, building models that help both hedgers and speculators understand their positions. We use the terms hedging and speculation without casting dispersion on either—they simply describe two halves of any risk management strategy and the willing participants in most asset trades.

Corporate Models

The job of a corporate manager could be described as controlling (hedging away) financial risk. We assume corporations exist to take on operating risk and use leverage to add an appropriate amount of financial risk. When a nonfinancial corporation tries to profit from financial transactions, however, it can quickly dilute its comparative advantage. Designing models that examine the risk inherent in any corporate strategy will help financial managers make better operating and financial decisions.

Managing Investment and Financial Risks

The financial management of the corporation spans both *investment* in real capital and *financing* those investment decisions by means of securities. When a corporation invests to introduce a new product or service it takes on risk. Every new operating venture typically requires capital and, by definition, its success cannot be a sure thing.¹ Without some risk, however, the corporation cannot expect to earn more than the risk-free rate.

Capital budgeting and financing are the two sides of the financial management coin. The modeler’s role is to help the corporation understand the risks on *both* the investment and financing sides of the business. A corporation should welcome risk in operating capital investments where it has expertise or some other form of comparative advantage. The bigger their advantage, the more risk the managers should be willing to take. Too much

¹ If a project reliably produced a return greater than Treasury bills people would rush to invest, produce a lot, and drive down the price until the excess return was competed away. Both existing and new products and services carry significant risks. While the first to bring an innovative project to market may reap a windfall, it is unlikely to be the normal course of competitive mature business.

financial capital risk, however, can quickly undo any operating gains. Models should help corporate managers control both investment and financial risk.

Modeling Financial Risks

Corporations should think of their financial decisions in terms of risk and reward. We will look at models that help forecast financial structure and measure a firm's cost of capital. Because we will use real companies, your assignments won't sugar coat the problems inherent in building these models. I don't believe you learn enough from simplified textbook models to be truly prepared for the real world.

Hedgers and Speculators

A market populated only by hedgers would be problematic. Hedgers who are equity investors want to lay off some of their risk. One possibility is to sell a portion of their portfolio. If the market only has hedgers, however, albeit with different risk tolerances, the impact of the sale on the market will result in a lower price than prevailed before the trade. In effect, the hedgers-only market with diverse risk tolerances is willing to absorb an increased supply of risk but only at a lower price. If the speculators' team is also allowed to play, the outcome is different. Speculators are willing to take on risk in hopes of a higher return so they absorb some of the increased supply, blunting the price impact. A market for risk with both hedgers and speculators is called well-functioning because some of the risk the hedgers want to avoid is borne by speculators.

Corporate financing decisions are part of the company's hedge. Corporations may have comparative financial advantages due to their home currency, regulatory status, credit history or the like. Few non-financial corporations, however, make financial speculation their primary business. Investment and merchant banks as well as private equity firms provide many of the speculative financing trades by using their own or their investors' money. Several of our security pricing models work equally well whether you are a corporation issuing, the investment bank underwriting, or the investor buying the security.

Managing Real and Financial Asset Risk

Sophisticated financial models have been developed for every imaginable financing need. Derivatives like forwards, futures, options, swaps, structured notes, asset-backed bonds, and so on all cater to the specialized financial hedging needs of corporations. At the same time, these securities offer speculators opportunities to earn rates of return commensurate with the risks. Consequently, derivatives serve both corporations and investors.



Models that serve to measure and manage risk on the real asset (capital budgeting) side are not as well developed. Academics and some practitioners talk about the option-like characteristics of capital investments and a variety of value-at-risk methods are available to gauge the risk of the firm's real assets. None of these tools, however, is as effective or as widely used on the asset side as financial derivatives are on the financing side. Nevertheless, corporate modelers must consider both real and financial capital to effectively serve the corporation.

We will not spend much time in this course on budgeting models. These models are typically unsophisticated and solidly entrenched in corporate

lore. However, we will build some relatively sophisticated corporate models that should be useful to any senior corporate executive.

Axioms of Modeling

Errors

- The number of mistakes produced by any model increases exponentially with model complexity.
- The number of mistakes decreases linearly with the age of the model. The only relatively mistake-free model is an old, often-used model. Reuse old spreadsheets to protect against errors.

Worse-is-better—a philosophy that is famous among programmers and fits modeling, too. In priority order, strive for:

Simplicity—the design must be simple, both in implementation and interface. It is more important for the implementation to be simple than the interface. Simplicity is the most important consideration in any design.

Correctness—the design must be correct in all observable aspects. It is slightly better to be simple than correct. Correctness and precision are two different qualities. Precision can be sacrificed for any other quality as long as the resulting decision is functional under the circumstances. Beware of precision masquerading as correctness.

Consistency—the design should be consistent in that it produces similar results in similar situations. Consistency can be sacrificed for simplicity in some cases, but it is better to drop those parts of the design that deal with less common circumstances than to introduce either implementational complexity or inconsistency.

Completeness—the design must cover as many important situations as is practical. All reasonably expected cases should be covered. Completeness can be sacrificed in favor of any other quality. In fact, completeness must be sacrificed whenever implementation simplicity is jeopardized. Consistency can be sacrificed to achieve completeness if simplicity is retained; especially worthless is consistency of interface.

<http://www.jwz.org/doc/worse-is-better.html>

Security

Data security and integrity are major worldwide concerns. Modelers should design with privacy in mind. Modelers should also make sure no parts of their models can be changed without an audit trail. Models will have to be changed but be sure who changed it and why are recorded. Don't delete old models—they are an invaluable back-up when changes get out of control.

Best Practices

Audit yourself before you get to the end. Devise tests for the model to which you know the answer. Audit early and often.

Cleanliness is best. Clean, well-organized models will produce better results and be used longer. Make the organization obvious.

The perfect is the enemy of the good.² Don't waste time making it perfect—make it work.

Leave plenty of tracks. It shouldn't take more than an hour for someone else to completely understand and modify your most complicated model.

Comments are cheap.

Write a description of your model and what it will do before you build it. Plan your model and model your plan. If you are building a model someone else might use (every model fits this category), make sure they understand what your model is supposed to do so they'll know if it is working properly.

No model worth constructing is ever finished.



Leave Tracks

COURSE PREREQUISITES

MBA core courses

COURSE RESOURCES

Financial Modeling, 3rd Edition, Simon Benninga, ISBN: 978-0-262-02628-4

The Little VBA Book, Robin Grieves, Mark Griffiths and Myoung Cheoi Seo,
ISBN: 978-1-4092-8785-8

Benninga's Financial Modeling is our textbook and is supplemented by material developed by the instructor.

The Little VBA Book will help you learn Visual Basic in as little as one afternoon. This course uses VBA when we study options to build our own user-defined function. A warm-up exercise is due for our second class meeting.

Outside Reading Materials All other readings are posted on Blackboard

GRADING

The following ranges will be used to determine your grades for the term.

A	93-100%	C+	77-79%
A-	90-92%	C	73-76%
B+	87-89%	C-	70-72%
B	83-86%	F	Below 70%
B-	80-82%		

² The original quote in French is "Le mieux est l'ennemi du bien," from Voltaire's Dictionnaire Philosophique (1764), literally translated as "The best is the enemy of good."

Final Exam

This course does not use exams. You earn points by submitting the required models on time and through weekly quizzes.

Grades and Grading Policy

This class allows flexibility in that the only three graded requirements are:

1. Weekly quizzes
2. Assigned Models
3. Class participation

You are invited to work on assignments in advance if your travel schedule overlaps with our class meetings. Make-up quizzes will be offered only in advance of the scheduled class day. Thirty minutes will be allocated each class period to the weekly quiz.

Weights are assigned as follows:

Type	Count	Points Each	Total Points	Course Weight
Weekly Quiz	8	100	800	30%
Models	8	200	1600	60%

Class participation counts for 10%, based on your contributions to class discussion.

Weekly quizzes are short answer format with questions about the readings or model from the previous week. Normally grades are posted 24 hours after class.

Assignments are graded based on whether or not your model performs the assigned task correctly. If your model does what is supposed to do, you will normally receive 140 points with 60 points reserved for adequate documentation. **Nonfunctioning models typically receive a zero.**

Late assignments

Assignment due dates are published in the class schedule and on Blackboard. Penalties for late assignments are 7 points per day for quizzes and 14 points per day for assignments. Note that assignments completed in class are graded and the late penalties apply unless prior arrangement with the instructor have been made. The grading scheme is skewed toward rewarding models that are correct with adequate documentation – even if they are late. Taking a few extra days to finish a model does not incur a significant penalty. **You cannot receive a passing grade in this class unless you turn in all quizzes and assignments before the last day of class.**

Incorrect assignments

If your model is determined to be incorrect (i.e., less than 140 points), you may revise and resubmit up to one week after your score is posted on Blackboard. The late penalty applies **from the posting date.**

Crummer Integrity Policy

The Crummer Integrity Policy applies to this class. Group work is encouraged because sometimes your colleagues are the best ones to explain. We are all interested in learning the material – together. You understand the difference between submitting a copy of someone else's work and getting the help you need to understand. I expect you to respect the difference and turn in your own work. Quizzes are open book, open notes, open Internet. However, you may not consult your colleagues.

As stated in the *Crummer School of Business Academic Integrity Policy*, faculty, students and staff are expected to uphold the highest level of ethical standards. This course requires that all students meet expectations of scholastic honesty, particularly while taking exams. During in-class exams, you may not share any information, materials or electronic files with others. Collusion or cheating in any form will not be tolerated. Failure to abide by these standards will result in full punishment as prescribed by the *Policy*.

SPECIAL ACCOMMODATIONS

Rollins College is committed to equal access and does not discriminate unlawfully against persons with disabilities in its policies, procedures, programs or employment processes. The College recognizes its obligations under the Rehabilitation Act of 1973 and the Americans with Disabilities Act of 1990 to provide an environment that does not discriminate against persons with disabilities.

If you are a person with a disability on this campus and anticipate needing any type of academic accommodations in order to participate in your classes, please make timely arrangements by disclosing this disability in writing to the Disability Services Office at (box 2613) - Thomas P. Johnson Student Resource Center, 1000 Holt Ave., Winter Park, FL, 37289. Appointments can be scheduled by calling 407-646-2354 or email: gmoskola@rollins.edu.

Financial Modeling

Class 1 March 6 Overview of Financial Modeling

Discussion Topics: Philosophy of Learning: Class organization, objectives, and philosophy; Learning Styles; The Role of Modeling in Contemporary Finance; Visual Basic programming

Sidebar: Market for MBAs with financial modeling skills

Read Before Class:

1. Benninga: Chapter 1³;
2. *Wall Street's Math Wizards Forgot a Few Variables*, New York Times, September 13, 2009⁴
3. *Errant Code? It's Not Just a Bug*, New York Times, August 8, 2012 (In this article the author identifies the real problem with models—supervisors (regulators, in this case) who don't understand modeling. This problem is pervasive.)
4. *Financial Models and the 5 Rules of Zen*, something a bit irreverent but insightful
5. *Finding the Human Factor in Bank Risk*, New York Times, April 3, 2013
6. Little VBA Book (skim to get a sense of the content and approach)

In Class Case: Models in Corporate Finance

Homework Problems: 1-1 through 1-14 (Note: Use the workbook provided on the CD—these worksheets show how the problems are set up. Sometimes you have to alter the spreadsheet to find the solution. These problems should improve your understanding of the chapter material – we will have a quiz on these calculations.)

In Class Exercise: Visual Basic programming (continued on your own after class)

In Class Quiz: Basic financial calculations in Excel

Learning Objectives: philosophy of learning and teaching, overview of financial modeling, review of corporate finance

Learning Outcomes: understand the major philosophical and practical issues confronting financial models, be familiar with the principals and function of VBA programming

Class 2 March 13 Corporate Finance – Cost of Capital

Discussion Topics: Alternate models of the cost of capital

Read Before Class:

1. Benninga: Chapter 2; The Cost of Capital;
2. E-Book – The Cost of Capital Chapter: <http://www.trunity.net/financialmodeling-example/view/article/54c57a680cf2a51e13d15b0b/?topic=54c941840cf2a51e13d15b90> If asked to register, please do – it's free. The videos are easiest to follow in full screen mode.

In Class Cases: Computing the Cost of Capital for Merck including valuation models

Case Due: VBA Project – Submit your VBA project workbook via the assignment function in Blackboard before the beginning of class.

³ Financial Modeling, 3rd Edition, Simon Benninga, ISBN:978-0-262-02628-4, with CD

⁴ All readings are available on Blackboard except the textbooks.

Learning Objectives: using financial information to analyze the cost of capital

Learning Outcomes: strategic insights to be gained from alternative cost of capital models

Class 3 March 20 Corporate Finance – Financial Statement Modeling

Discussion Topics: Financial statements from a finance perspective

Read Before Class: Benninga: Chapters 3 and 4, Financial Statement Modeling;

Financial Modeling – E-Book, Forecasting Capital requirements chapter:

[http://www.trinity.net/financialmodeling-](http://www.trinity.net/financialmodeling-example/view/article/53ab533d0cf226e0bdc0128a/?topic=54c941810cf2a51e13d15)

[example/view/article/53ab533d0cf226e0bdc0128a/?topic=54c941810cf2a51e13d15](http://www.trinity.net/financialmodeling-example/view/article/53ab533d0cf226e0bdc0128a/?topic=54c941810cf2a51e13d15)
[b8b](http://www.trinity.net/financialmodeling-example/view/article/53ab533d0cf226e0bdc0128a/?topic=54c941810cf2a51e13d15)

If asked to register, please do – it's free. The videos are easiest to follow in full screen mode.

Case Due: Merck's Cost of Capital – Submit your cost of capital workbook model via the assignment function in Blackboard before the beginning of class.

In Class Case: PPG's Financial Model – both Benninga and the E-Book cover financial forecasting. I recommend you read both. The E-Book will lead you through the steps with a simple company and using Kraft as an example. The deliverable is working model that allows for PPG's one-year sales growth rates between 0% and 100%.

Learning Objectives: financial statement modeling, *pro forma* forecasts, free cash flows, return on equity

Learning Outcomes: understand how to model financial statements to aid strategic planning and forecasting

Class 4 March 27 Monte Carlo Analysis

Discussion Topics: Monte Carlo analysis

In Class Case: Building a Monte Carlo model with independent and correlated variables

Case Due: PPG's Financial Model. Submit your workbook model via the assignment function in Blackboard before the beginning of class.

Learning Objectives: financial forecasting using a randomized technique

Learning Outcomes: understand the importance of economic rationale for financial forecasts and some of the models available for modeling financial variables

Class 5 April 3 Capital Budgeting

Discussion Topics: modeling a capital budgeting project with simulated inputs (Monte Carlo)

Read Before Class: E-Book – Practical Applications: Capital Budgeting:

<http://www.trinity.net/financialmodeling-example/topics/view/57266aec0cf2bcc6dd250f33/>

Learning Objectives: capital budgeting techniques; strengths and weaknesses

Learning Outcomes: be able to model uncertainty in capital budgeting using Monte Carlo techniques

Class 6 April 10 Mean-Variance Optimization Models

Discussion Topics: Markowitz-Sharpe Portfolio Models

Read Before Class: Benninga: Chapters 8, 9, 10 and 12 (skim) and E-Book - Portfolio Models Chapter: <http://www.trunity.net/financialmodeling-example/view/article/53ab4d6d0cf226e0bdc0127f/?topic=54c941810cf2a51e13d15b8b> (this reading replaces the Benninga chapters, although you'll want to be familiar with those chapters as a reference)

Case Due: Capital Budgeting. Submit your workbook via the assignment function in Blackboard before the beginning of class.

Learning Objectives: alternative quantitative portfolio management techniques; strengths and weaknesses; extracting implicit weights

Learning Outcomes: understand how to apply alternative quantitative portfolio management techniques to stocks, bonds and alternative assets; comparison with traditional models

Class 7 April 17 Option Pricing

Discussion Topics: Binomial option pricing models

Read Before Class: Benninga: Chapter 16, 17 (My advice is to read 16.1 through 16.5.2 and skim the rest of Chapter 16. After reading this material you should be able to value a European put and call options at expiration.) Then read E-book chapter: Modeling Equity Options: <http://www.trunity.net/financialmodeling/view/article/53bc61fc0cf2cebe68b40066/?topic=53a437070cf226e0bdc00844>

Case Due: Mean-Variance Portfolio Models. Submit your Portfolio Model workbook via the assignment function in Blackboard before the beginning of class.

Learning Objectives: option pricing; binomial models; implement a binomial option pricing model

Learning Outcomes: understand the basics of options; how and when to use binomial pricing models

Class 8 April 24 Classification Models in Finance

Discussion topics: Bond ratings and bankruptcy models; multiple discriminant analysis and neural networks

Class Presentation: Classification models with MDA and Neural Networks

In Class Case: application of linear (multiple discriminant analysis) and nonlinear (neural network) models to bankruptcy prediction

Case Due: option pricing with VBA UDF. Submit your workbook model via the assignment function in Blackboard before class.

Read Before Class: (skim) Benninga: Chapters 18, 19, and 20; Classification Models in Finance.

PROGRAM GOALS AND MEASURABLE OBJECTIVES

This section of the syllabus will not be provided to students. Instead, it will be included in the copy provided to the Dean’s office and will be available for internal use. Use the following scale to indicate the relevance of each of the program goals and objectives

1. Minor or no importance
2. Important
3. Essential

Program Goal or Objective	Relevance
Integrated learning	2
Experiential learning	3
Global	1
Leadership	1
Innovation	1

Please also select types of assignments used for your class.

Integration		Experiential				Content		
Joint Lecture	Multidisciplinary Assignments	Case Study	Simulation	Guest Speaker	Applied Project	Global	Leadership	Innovation
	X		X		X			

The following guidelines are provided to assist in the assessment of the extent to which the course addresses the program goals and objectives.

Integrated learning component – The models in this class are cross-functional, spanning finance, accounting and operations.

Experiential learning component – The students in this class learn by doing. Each of the eight models the students build is a practical experience in managing the risk of the firm.

Global activities – Not significant.

Leadership activities – Not significant.

Innovation activities – Modeling is about helping the firm manage risk. Each model requires the students to be creative in solving real-world problems like estimating the cost of capital, using randomized analysis to managing a bond portfolio to satisfy a defined benefit pension plan and evaluating complex options. Students take away working Monte Carlo simulation models they can apply on the job.



**Crummer Graduate School of Business
Rollins College**

Course Syllabus

[Skip to Class Schedule](#)

**FINANCIAL MODELING in INVESTMENT MANAGEMENT
FIN 612
2 Credit Hours**

Room 108

Office Location: Crummer Hall Room 106

Email Address:

Phone:

COURSE DESCRIPTION AND OBJECTIVES

Financial modeling is an essential part of sophisticated financial operations from corporations to investment banks to research firms. The skills you learn in this course will make you an attractive candidate for prestigious investment companies and enhance your opportunities within your current company. Take your time to develop elegant models as you work through the assignments in this course and you will have a portfolio of projects that will help you get interviews, jobs, and promotions. This course is a hands-on, application-oriented tour of financial models used in investment analysis and portfolio management. You will make extensive use of Excel and learn Visual Basic—two of the financial modeler’s essential tools. Because the financial principles supporting the models we build were covered in other finance courses, we will only spend a little time on the financial theory behind each model. If the motivation behind each model is a bit obscure to you, I have provided a list of books and articles that you should consult to learn more about any models that are unfamiliar to you. As always, ask if you need help.

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Corporations should think of their financial decisions in terms of risk and reward. We will look at models that help forecast financial structure and measure a firm's cost of capital. Because we will use real companies, your assignments won't sugar coat the problems inherent in building these models. I don't believe you learn enough from simplified textbook models to be truly prepared for the real world.

Hedgers and Speculators

A market populated only by hedgers would be problematic. Hedgers who are equity investors want to lay off some of their risk. One possibility is to sell a portion of their portfolio. If the market only has hedgers, however, albeit with different risk tolerances, the impact of the sale on the market will result in a lower price than prevailed before the trade. In effect, the hedgers-only market with diverse risk tolerances is willing to absorb an increased supply of risk but only at a lower price. If the speculators' team is also allowed to play, the outcome is different. Speculators are willing to take on risk in hopes of a higher return so they absorb some of the increased supply, blunting the price impact. A market for risk with both hedgers and speculators is called well-functioning because some of the risk the hedgers want to avoid is borne by speculators.

Corporate financing decisions are part of the company's hedge. Corporations may have comparative financial advantages due to their home currency, regulatory status, credit history or the like. Few non-financial corporations, however, make financial speculation their primary business. Investment and merchant banks as well as private equity firms provide many of the speculative financing trades by using their own or their investors' money. Several of our security pricing models work equally well whether you are a corporation issuing, the investment bank underwriting, or the investor buying the security.

Managing Real and Financial Asset Risk

Sophisticated financial models have been developed for every imaginable financing need. Derivatives like forwards, futures, options, swaps, structured notes, asset-backed bonds, and so on all cater to the specialized financial hedging needs of corporations. At the same time, these securities offer speculators opportunities to earn rates of return commensurate with the risks. Consequently, derivatives serve both corporations and investors.



Models that serve to measure and manage risk on the real asset (capital budgeting) side are not as well developed. Academics and some practitioners talk about the option-like characteristics of capital investments and a variety of value-at-risk methods are available to gauge the risk of the firm's real assets. None of these tools, however, is as effective or as widely used on the asset side as financial derivatives are on the financing side. Nevertheless, corporate modelers must consider both real and financial capital to effectively serve the corporation.

We will not spend much time in this course on budgeting models. These models are typically unsophisticated and solidly entrenched in corporate

lore. However, we will build some relatively sophisticated corporate models that should be useful to any senior corporate executive.

Axioms of Modeling

Errors

- The number of mistakes produced by any model increases exponentially with model complexity.
- The number of mistakes decreases linearly with the age of the model. The only relatively mistake-free model is an old, often-used model. Reuse old spreadsheets to protect against errors.

Worse-is-better—a philosophy that is famous among programmers and fits modeling, too. In priority order, strive for:

Simplicity—the design must be simple, both in implementation and interface. It is more important for the implementation to be simple than the interface. Simplicity is the most important consideration in any design.

Correctness—the design must be correct in all observable aspects. It is slightly better to be simple than correct. Correctness and precision are two different qualities. Precision can be sacrificed for any other quality as long as the resulting decision is functional under the circumstances. Beware of precision masquerading as correctness.

Consistency—the design should be consistent in that it produces similar results in similar situations. Consistency can be sacrificed for simplicity in some cases, but it is better to drop those parts of the design that deal with less common circumstances than to introduce either implementational complexity or inconsistency.

Completeness—the design must cover as many important situations as is practical. All reasonably expected cases should be covered. Completeness can be sacrificed in favor of any other quality. In fact, completeness must be sacrificed whenever implementation simplicity is jeopardized. Consistency can be sacrificed to achieve completeness if simplicity is retained; especially worthless is consistency of interface.

<http://www.jwz.org/doc/worse-is-better.html>

Security

Data security and integrity are major worldwide concerns. Modelers should design with privacy in mind. Modelers should also make sure no parts of their models can be changed without an audit trail. Models will have to be changed but be sure who changed it and why are recorded. Don't delete old models—they are an invaluable back-up when changes get out of control.

Best Practices

Audit yourself before you get to the end. Devise tests for the model to which you know the answer. Audit early and often.

Cleanliness is best. Clean, well-organized models will produce better results and be used longer. Make the organization obvious.

The perfect is the enemy of the good.² Don't waste time making it perfect—make it work.

Leave plenty of tracks. It shouldn't take more than an hour for someone else to completely understand and modify your most complicated model.

Comments are cheap.

Write a description of your model and what it will do before you build it. Plan your model and model your plan. If you are building a model someone else might use (every model fits this category), make sure they understand what your model is supposed to do so they'll know if it is working properly.

No model worth constructing is ever finished.



Leave Tracks

COURSE PREREQUISITES

MBA core courses

COURSE RESOURCES

Financial Modeling, 3rd Edition, Simon Benninga, ISBN: 978-0-262-02628-4

The Little VBA Book, Robin Grieves, Mark Griffiths and Myoung Cheoi Seo,
ISBN: 978-1-4092-8785-8

Benninga's Financial Modeling is our textbook and is supplemented by material developed by the instructor.

The Little VBA Book will help you learn Visual Basic in as little as one afternoon. This course uses VBA when we study options to build our own user-defined function. A warm-up exercise is due for our second class meeting.

Outside Reading Materials All other readings are posted on Blackboard

GRADING

The following ranges will be used to determine your grades for the term.

A	93-100%	C+	77-79%
A-	90-92%	C	73-76%
B+	87-89%	C-	70-72%
B	83-86%	F	Below 70%
B-	80-82%		

² The original quote in French is "Le mieux est l'ennemi du bien," from Voltaire's Dictionnaire Philosophique (1764), literally translated as "The best is the enemy of good."

Final Exam

This course does not use exams. You earn points by submitting the required models on time and through weekly quizzes.

Grades and Grading Policy

This class allows flexibility in that the only three graded requirements are:

1. Weekly quizzes
2. Assigned Models
3. Class participation

You are invited to work on assignments in advance if your travel schedule overlaps with our class meetings. Make-up quizzes will be offered only in advance of the scheduled class day. Thirty minutes will be allocated each class period to the weekly quiz.

Weights are assigned as follows:

Type	Count	Points Each	Total Points	Course Weight
Weekly Quiz	8	100	800	30%
Models	8	200	1600	60%

Class participation counts for 10%, based on your contributions to class discussion.

Weekly quizzes are short answer format with questions about the readings or model from the previous week. Normally grades are posted 24 hours after class.

Assignments are graded based on whether or not your model performs the assigned task correctly. If your model does what is supposed to do, you will normally receive 140 points with 60 points reserved for adequate documentation. **Nonfunctioning models typically receive a zero.**

Late assignments

Assignment due dates are published in the class schedule and on Blackboard. Penalties for late assignments are 7 points per day for quizzes and 14 points per day for assignments. Note that assignments completed in class are graded and the late penalties apply unless prior arrangement with the instructor have been made. The grading scheme is skewed toward rewarding models that are correct with adequate documentation – even if they are late. Taking a few extra days to finish a model does not incur a significant penalty. **You cannot receive a passing grade in this class unless you turn in all quizzes and assignments before the last day of class.**

Incorrect assignments

If your model is determined to be incorrect (i.e., less than 140 points), you may revise and resubmit up to one week after your score is posted on Blackboard. The late penalty applies **from the posting date.**

Crummer Integrity Policy

The Crummer Integrity Policy applies to this class. Group work is encouraged because sometimes your colleagues are the best ones to explain. We are all interested in learning the material – together. You understand the difference between submitting a copy of someone else's work and getting the help you need to understand. I expect you to respect the difference and turn in your own work. Quizzes are open book, open notes, open Internet. However, you may not consult your colleagues.

As stated in the *Crummer School of Business Academic Integrity Policy*, faculty, students and staff are expected to uphold the highest level of ethical standards. This course requires that all students meet expectations of scholastic honesty, particularly while taking exams. During in-class exams, you may not share any information, materials or electronic files with others. Collusion or cheating in any form will not be tolerated. Failure to abide by these standards will result in full punishment as prescribed by the *Policy*.

SPECIAL ACCOMMODATIONS

Rollins College is committed to equal access and does not discriminate unlawfully against persons with disabilities in its policies, procedures, programs or employment processes. The College recognizes its obligations under the Rehabilitation Act of 1973 and the Americans with Disabilities Act of 1990 to provide an environment that does not discriminate against persons with disabilities.

If you are a person with a disability on this campus and anticipate needing any type of academic accommodations in order to participate in your classes, please make timely arrangements by disclosing this disability in writing to the Disability Services Office at (box 2613) - Thomas P. Johnson Student Resource Center, 1000 Holt Ave., Winter Park, FL, 37289. Appointments can be scheduled by calling 407-646-2354 or email: gmoskola@rollins.edu.

Financial Modeling in Investment Management

Class 1 Overview of Financial Modeling

Discussion Topics: Philosophy of Learning: Class organization, objectives, and philosophy; Learning Styles; The Role of Modeling in Contemporary Finance; Visual Basic programming

Sidebar: Market for MBAs with financial modeling skills

Read Before Class:

1. Benninga: Chapter 1³;
2. *Wall Street's Math Wizards Forgot a Few Variables*, New York Times, September 13, 2009⁴
3. *Errant Code? It's Not Just a Bug*, New York Times, August 8, 2012 (In this article the author identifies the real problem with models—supervisors (regulators, in this case) who don't understand modeling. This problem is pervasive.)
4. *Financial Models and the 5 Rules of Zen*, something a bit irreverent but insightful
5. *Finding the Human Factor in Bank Risk*, New York Times, April 3, 2013
6. Little VBA Book (skim to get a sense of the content and approach)

In Class Case: Models in Investment Management

Homework Problems: 1-1 through 1-14 (Note: Use the workbook provided on the CD—these worksheets show how the problems are set up. Sometimes you have to alter the spreadsheet to find the solution. These problems should improve your understanding of the chapter material – we will have a quiz on these calculations.)

In Class Exercise: Visual Basic programming (continued on your own after class)

In Class Quiz: Basic financial calculations in Excel

Learning Objectives: philosophy of learning and teaching, overview of financial modeling, review of corporate finance

Learning Outcomes: understand the major philosophical and practical issues confronting financial models, be familiar with the principals and function of VBA programming

Class 2 Cost of Capital – The cost of capital is an ingredient in many asset valuation models

Discussion Topics: Alternate models of the cost of capital

Read Before Class:

1. Benninga: Chapter 2; The Cost of Capital;
2. E-Book – The Cost of Capital Chapter: <http://www.trunity.net/financialmodeling-example/view/article/54c57a680cf2a51e13d15b0b/?topic=54c941840cf2a51e13d15b90> If asked to register, please do – it's free. The videos are easiest to follow in full screen mode.

In Class Cases: Computing the Cost of Capital for Merck including valuation models

Case Due: VBA Project – Submit your VBA project workbook via the assignment function in Blackboard before the beginning of class.

³ Financial Modeling, 3rd Edition, Simon Benninga, ISBN:978-0-262-02628-4, with CD

⁴ All readings are available on Blackboard except the textbooks.

Learning Objectives: using financial information to analyze the cost of capital

Learning Outcomes: strategic insights to be gained from alternative cost of capital models

Class 3 Mean-Variance Optimization Models

Discussion Topics: Markowitz-Sharpe Portfolio Models

Read Before Class: Benninga: Chapters 8, 9, 10 and 12 (skim) and E-Book - Portfolio Models

Chapter: [http://www.trunity.net/financialmodeling-](http://www.trunity.net/financialmodeling-example/view/article/53ab4d6d0cf226e0bdc0127f/?topic=54c941810cf2a51e13d15b8b)

[example/view/article/53ab4d6d0cf226e0bdc0127f/?topic=54c941810cf2a51e13d15b8b](http://www.trunity.net/financialmodeling-example/view/article/53ab4d6d0cf226e0bdc0127f/?topic=54c941810cf2a51e13d15b8b) (this reading replaces the Benninga chapters, although you'll want to be familiar with those chapters as a reference)

Case Due: Cost of capital. Submit your workbook via the assignment function in Blackboard before the beginning of class.

Learning Objectives: alternative quantitative portfolio management techniques; strengths and weaknesses; extracting implicit weights

Learning Outcomes: understand how to apply alternative quantitative portfolio management techniques to stocks, bonds and alternative assets; comparison with traditional models

Class 4 Investments – Black-Litterman Models

Discussion Topics: Black-Litterman portfolio models

Read Before Class: Benninga: Chapter 13

Case Due: Mean-Variance Portfolio Models. Submit your Portfolio Model workbook via the assignment function in Blackboard before the beginning of class.

Learning Objectives: alternative quantitative portfolio management techniques; strengths and weaknesses; extracting implicit weights

Learning Outcomes: understand how to apply alternative quantitative portfolio management techniques to stocks, bonds and alternative assets; comparison with traditional models

Class 5 Value-at-Risk

Discussion Topics: Monte Carlo Historically-based VAR models

Read Before Class: Benninga: Chapter 15; In Plato's Cave: Mathematical models are a powerful way of predicting financial markets. But they are fallible, *The Economist*, January 22, 2009 (available on Blackboard); e-Book Value at Risk – VaR

<http://www.trunity.net/financialmodeling-example/view/article/53bc61900cf2fd269210c1c1/?topic=54c941810cf2a51e13d15b8b>

Case Due: Black-Litterman Portfolio Model. Submit your Portfolio Model workbook via the assignment function in Blackboard before the beginning of class.

In Class Case: Portfolio VAR

Learning Objectives: basics of value-at-risk analysis

Learning Outcomes: understand the pros and cons of VAR; understand the practical application of alternative VAR methods

Class 6 Option Pricing

Discussion Topics: Binomial option pricing models

Read Before Class: Benninga: Chapter 16, 17 (My advice is to read 16.1 through 16.5.2 and skim the rest of Chapter 16. After reading this material you should be able to value a European put and call options at expiration.) Then read E-book chapter: Modeling Equity Options:
<http://www.trinity.net/financialmodeling/view/article/53bc61fc0cf2cebe68b40066/?topic=53a437070cf226e0bdc00844>

Case Due: Monte Carlo Model. Submit your Portfolio Model workbook via the assignment function in Blackboard before the beginning of class.

Learning Objectives: option pricing; binomial models; implement a binomial option pricing model
Learning Outcomes: understand the basics of options; how and when to use binomial pricing models

Class 7 Bond Portfolio Management and Bond Options

Discussion Topics: Duration and immunization strategies; term structure models

Read Before Class: Benninga: Chapter 25, 26, 27; Duration: A Practitioner's View, Bob Kopprasch, *Journal of Applied Finance*, Fall 2006 p. 138 (available on Blackboard)—read primarily to get an idea of the breadth of duration measures used by practitioners; Fabozzi, Chapter 14, Analysis of Bonds with Embedded Options, Valuing Bond Options; E-book Chapter Bond Options:
<http://www.trinity.net/financialmodeling/view/article/53bc62c90cf2cebe68b4006c/?topic=53a437070cf226e0bdc00844>

In Class Cases: Modeling immunization strategies and term structures: A Better Mousetrap. Classification Models in Finance

Learning Objectives: bond price dynamics; term structures, bankruptcy prediction models
Learning Outcomes: be able to model an immunization strategy; understand basic term structure models; understand the basics of statistical classification models

Class 8 Classification Models in Finance

Discussion topics: Bond ratings and bankruptcy models; multiple discriminant analysis and neural networks

Read Before Class: (skim) Benninga: Chapters 18, 19, and 20; Classification Models in Finance.

Class Presentation: Classification models with MDA and Neural Networks

In Class Case: application of linear (multiple discriminant analysis) and nonlinear (neural network) models to bankruptcy prediction

Case Due: Bond Option Pricing Models. Submit your workbook model via the assignment function in Blackboard before the beginning of class.

PROGRAM GOALS AND MEASURABLE OBJECTIVES

This section of the syllabus will not be provided to students. Instead, it will be included in the copy provided to the Dean’s office and will be available for internal use. Use the following scale to indicate the relevance of each of the program goals and objectives

1. Minor or no importance
2. Important
3. Essential

Program Goal or Objective	Relevance
Integrated learning	2
Experiential learning	3
Global	1
Leadership	1
Innovation	1

Please also select types of assignments used for your class.

Integration		Experiential				Content		
Joint Lecture	Multidisciplinary Assignments	Case Study	Simulation	Guest Speaker	Applied Project	Global	Leadership	Innovation
	X		X		X			

The following guidelines are provided to assist in the assessment of the extent to which the course addresses the program goals and objectives.

Integrated learning component – The models in this class are cross-functional, spanning finance, accounting and operations.

Experiential learning component – The students in this class learn by doing. Each of the eight models the students build is a practical experience in managing risk.

Global activities – Not significant.

Leadership activities – Not significant.

Innovation activities – Modeling is about managing risk. Each model requires the students to be creative in solving real-world problems like estimating the cost of capital, using randomized analysis to managing a bond portfolio to satisfy a defined benefit pension plan and evaluating complex options. Students take away working models, including Monte Carlo simulation, they can apply on the job and in other classes.

Crummer Investment Management Employee Handbook



Effective January 1, 2017



Crummer Investment Management Employee Handbook

Welcome to Crummer Investment Management. This handbook will familiarize you with our firm and your role as a new associate.

Crummer Investment Management has been serving institutional and individual clients for over 50 years. We provide portfolio management advice by developing investment policy statements, designing asset allocation strategies, and recommending individual securities. We counsel our clients that over the long run two factors determine portfolio performance: asset allocation and security selection. Asset allocation determines expected investment risk and return and the best asset allocation policy respects long-term market history as well as short-term prospects based on economic analysis with a sector focus. Investment managers contribute to portfolio performance through security selection and market timing. Our firm has three operating divisions: portfolio strategy and security selection, economic analysis, and administration (including account representatives, IT, accounting, legal, and compliance).

Portfolio Strategy and Security Selection

The Portfolio Team is responsible for all investment portfolios. This division is divided into teams by client. Investment policy and portfolio strategy are at the heart of our firm. We insist that all our clients formally adopt an investment policy statement that outlines their objectives and constraints. Each statement positions asset allocation as the client's ultimate responsibility, with our help. We conduct annual reviews with all clients that cover our views on sector and asset class return and risk as well as any policy changes we recommend. We strive to help each client understand the importance of strategic and tactical asset allocation as risk management policy tools.

We recommend individual securities within the context of our asset allocation strategy. Our recommendations follow from our economic analysis. We believe U.S. capital markets are relatively efficient but we still spend a great deal of time on fundamental research. We reference the consensus view while conducting our own analysis. Using our proprietary DCF and P/E models, we favor companies that have a fundamental long run growth story with a short-term catalyst. We also look for signals from insider ownership and trading, the quality of the Board, share repurchase programs, float, and other areas often neglected by main line analysts.

For security selection we divide the equity universe into large growth and large value as well as small growth and value. We typically avoid transaction risk by considering only individual equities that are listed on a U.S. exchange, including ADRs. Outside the U.S. we also recognize emerging markets as a separate asset class. Upon request we will consider midcap equities as an asset class. Our bond asset classes cover short, medium, and long duration domestic governments and corporates as well as foreign sovereigns. We do not usually consider foreign corporate bonds because of the difficulty in obtaining reliable credit analysis. REITs normally cover any allocation to real estate, at the client's request. We will invest in well-managed equity and bond mutual funds or ETFs when appropriate.

Economic Analysis

Our economic analysis builds a scenario for the next twelve months at the macro level and focuses on the U.S. Every portfolio management team uses this scenario to develop their own views on the prospects for sectors and individual securities. We use the eleven S&P sectors: Consumer Discretionary, Consumer Staples, Energy, Financials, Health Care, Industrials, Materials, Real Estate, Technology, Telecommunications, and Utilities, as the focus of our analysis. We weight these sectors based on their expected performance during our forecast economic scenario. This year we face the additional challenge of forecasting the effects of the market's reaction to the new administration's policies.

Managing Global Portfolios

FactSet

FactSet is essential to our analysis. If you are not familiar with this resource, please make arrangements to do so within two weeks of your hire date.

Company Visits

Company site visits are an important part of our firm's due diligence. Typically, analysts are asked to visit companies that are not part of their portfolios to provide an independent perspective. When visits can be arranged, we invite shareholder relations officers to visit us.

Compliance

Compliance is an integral component of everything we do. We believe following all laws, rules, and regulations is important not only because it is our obligation but also because it makes good business sense. Ultimately, regulation protects our clients and our reputation. One thoughtless act can ruin this firm's reputation. Your colleagues are counting on you.

Performance Appraisal

Your raise and bonus (course grades) will be based on your performance of the tasks assigned:

- 75% written security research and presentation
- 15% class participation and contribution
- 10% personal investment policy statement

Crummer Investment Management Integrity Policy

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Special Accommodations

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If you are a person with a disability on this campus and anticipate needing any type of academic accommodations in order to participate in your classes, please make timely arrangements by disclosing this disability in writing to the Disability Services Office at (box 2613) - Thomas P. Johnson Student Resource Center, 1000 Holt Ave., Winter Park, FL, 32789. Appointments can be scheduled by calling 407-646-2354 or email: gmoskola@rollins.edu.

**FIN 609 Class Schedule
Spring 2017**

Class 1 Introduction to security analysis and portfolio management; review current portfolio, investment policy statement, team organization and individual assignments; valuation techniques

Read:

1. Crummer Investment Management Employee Handbook (course syllabus);
2. Crummer SunTrust Investment Policy Statement
3. Crummer Investment Management Memo titled: Rollins College Account – Crummer SunTrust Portfolio, dated January 22, 2017
4. 2016 Crummer SunTrust Report
5. E-Book chapter – Equity Valuation
6. E-Book Chapter – Forecasting Capital Requirements
7. Plan B – pages 1 through 4

Presentation: ROE bottom-up valuation models

Learning Outcomes: review of bottom up and top down security analysis; understand the relation between portfolio management theory and practice; introduction to reading and interpreting investment account statements; investment policy statements

Guest speakers: Shawn Draheim, Walt Disney World, Nathan Morgan, Red Lobster, Chris Enger, Aviance Capital Management.

Class 2 Pro forma security analysis with percentage-of-sales models; understand the motivations for differences in financial accounting practices; gain experience constructing *pro forma* financial statements suitable for valuation analysis; sector overview

Read:

1. PCE Sector Reports
2. Plan B – pages 4 through 6

Assignment due: Sector analysts review current holdings performance per last year's report

Presentation: Leases and Off-Balance Sheet Financing

Learning Outcomes: review the role of growth in security valuation models using pro forma financial statement models

Guest speaker: Regina Chi, [DePrince, Race and Zollo](#), Investment analyst

Class 3 Security selection in practice; Qualitative and quantitative security analysis; Growth stories; security research; Discounted Cash Flow (one, two, three stage and H-models); P/E valuation; Asset allocation strategies, the role of asset classes in the portfolio

Read:

1. Crummer Investment Management Memo titled: Crummer SunTrust Portfolio Security Analysis, dated January 24, 2015
2. As Europe and Asia Hoard Cash, Economists See Echoes of Crisis, New York Times, October 24, 2016
3. Why a Strengthening Dollar is Bad for the World Economy, Economist, December 3, 2016

Managing Global Portfolios

4. Can the US Economy Return to Dynamic and Inclusive Growth?, McKinsey Global Institute, November 2016
5. Plan B – pages 6 through 8

Assignment due: Pro forma models Group One

Presentation: Quantitative Equity Valuation

Learning Outcomes: understand the rationale behind valuation models and how these models are applied in practice; understand the implications of asset class allocations; apply the history of relative asset class returns to asset allocation decisions

Guest speaker: Professor William Seyfreid, Crummer, Bob Judge, Government Loan Solutions

Class 4 Qualitative Equity Research

Read:

1. Competition is for Losers
2. Why Moats Matter – Morningstar video available on Blackboard

Assignment due: Pro forma models Group Two

Learning Outcomes: understand the techniques of qualitative valuation models and how these models are applied in practice

Class 5 Earnings Management

Read:

1. Earnings Momentum and Earnings Management, Myers, Myers, and Skinner, *Journal of Accounting, Auditing & Finance*, Spring 2007, Vol. 22, No. 2 p. 249-284.
2. Earnings Momentum and Earnings Management Guide, Singleton, 2017.

Presentation: Earnings Momentum and Earnings Management

Learning Outcomes: contemporary portfolio management techniques

Class 6 Portfolio Models – asset class and risk weighted; quantitative and qualitative considerations

Read:

1. Risk Parity
2. AQR Risk Parity Fund

Guest speaker: Rob Roy, Adventist Health Systems

Learning Outcomes: contemporary portfolio management techniques

Class 7 Fixed income portfolio strategies and outlook; Credit analysis; Determine draft economic outlook

Learning Outcomes: understand the perspective of fixed income analysts

Read:

1. Developing an Investment Policy Statement
2. Bonds and Bond Ratings (3 parts)

Assignment due: Review of holdings. Consumer Discretionary, Consumer Durables, Financials, Energy, Utilities, and Real Estate review their sectors and defend buy and sell recommendations.

Presentation: Credit Analysis by Credit Rating Agencies

Guest speaker: Jay Menozzi, Chief Investment Officer, [Semper Capital Management](#)

Learning Outcomes: Understand the specialized focus of credit analysis

Class 8 Sector analysis and research; Portfolio strategy

Read:

1. *Understanding Sectors*, Standard & Poor's, 2008
2. *Global Industry Standard Classification*, Standard & Poor's and MSCI Barra, 2006
3. Using Bond Ratings to Pick Stocks, Martin Fridsen, e-mail memo dated July 14, 2010.
4. Historical Asset Class Rotation -- Taking Turns at the Top

Assignment due: Review of holdings. Health Care, Industrials, Materials, Technology, Telecom, and Bonds review their sectors and defend buy and sell recommendations.

Learning Outcomes: Relate economic scenarios, sector behavior and portfolio strategy

Guest speaker: Rick Ahl, Ahl Investment Management

Class 9 Economic Outlook; Confirm economic outlook; Set draft sector allocations

Read:

1. Federal Reserve's Beige Book, December 2016, Summary section (about 6 pages)

Learning Outcomes: Relate economic scenarios, sector behavior and portfolio strategy; Understand the specialized focus of credit analysis

Class 10 Technical analysis in portfolio management and security selection; private equity investment opportunities

Read:

1. *Understanding Head and Shoulders*, Bloomberg Magazine, September 2010
2. *Technical Analysis Handbook*, Bloomberg, May 2010. Skim for general understanding except read Bollinger Bands, Money Flow, and Relative Strength indicators for details and Bloomberg implementation.
3. The Volume Clock: Insights into the High Frequency Paradigm, David Easley, Marcos M. López de Prado and Maureen O'Hara, *Journal of Portfolio Management*, January 2012
4. A Speed Limit for the Stock Market, Roger Lowenstein, *New York Times*, October 1, 2012
5. Tractor Beam, Dennis Dick, *CFA Magazine*, March-April 2012

Assignment due: Personal IPS

Learning Outcomes: Be able to describe the role of technical analysis in security selection and portfolio management

Guest speaker: Scott Connor, CFA, CFP, ChFC, [Doyle Wealth Management](#) and Sean Warrington, CFA, [Alfred I. DuPont Trust](#)

Class 11 Modern portfolio theory tools: mean-variance optimization; asset class approach; building blocks method and Black-Litterman analysis; team reviews and selects sector allocation

Read: Crummer SunTrust Portfolio Management – Black-Litterman, dated January 24, 2015

How Do You Know When You're Done? Ralph Wanger, CFA Magazine, January-February 2012. Guidance on security research.

Assignment due: Proposed changes to the portfolio. Consumer Discretionary, Consumer Durables, Financials, Materials, Utilities, and Real Estate present their recommendations for potential buys, sells and holds in their sector and demonstrate how well their recommended allocation would have tracked their sector index.

Learning Outcomes: understand how the tools of modern portfolio theory are used in practice; be able to apply MVO and Black-Litterman to a portfolio

Guest speaker: Philip Rich, Market Strategist, [Seaside National Bank](#)

Class 12 Portfolio Strategy – team discusses trade recommendations and selects sector securities; reviews asset allocation and sector weights; finalizes trades

Assignment due: Proposed changes to the portfolio. Health Care, Industrials, Energy, IT, Telecommunications, and Bonds present their recommendations for potential buys, sells and holds in their sector and demonstrate how well their recommended allocation would have tracked their sector index.

Learning Outcomes: understand how to translate theoretical models into investment decisions

Guest speaker: Deryck Harmer, Triloma Investments; James Hunt, [Tupperware Brands](#)

Class 13 Portfolio Strategy – team reviews recommended portfolio against investment policy statement; sector guidelines, asset allocation constraints and economic scenario

Learning Outcomes: understand the importance of consistency with investment mandate

Class 14 Portfolio Strategy – team reviews MVO, VaR and Black-Litterman results;

Final report and trade sheets due

Learning Outcomes: apply valuation tools and statistical analysis to build a case for an investment strategy

Guest Speaker: Derek Grimm, Merrill Lynch

Class 15 Presentation dress rehearsal

Class 16 Presentation to panel of investment management practitioners.



Course Syllabus – Fall II, 2017

INTL XXXX
COURSE NUMBER
2.0 Credit Hours
Johnson/Turkanik
Classroom: (TBD)

Office Location: Crummer Hall, 224
Email Address: jpjohnson@rollins.edu
Phone: 407-646-2486

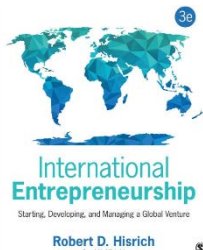
COURSE DESCRIPTION AND OBJECTIVES

This course provides students with a practical, hands-on approach to launching a venture internationally. Students will study the processes of launching an entrepreneurial venture in one or more international markets. Upon completion of the course, students will be able to:

- analyze the processes of international entrepreneurship from both theoretical and practical perspectives
- identify the main characteristics of successful international entrepreneurs
- list the advantages and disadvantages of international expansion
- distinguish between traditional and new forms of international entrepreneurship
- identify and evaluate suitable sources of funds for international expansion
- create an appropriate international strategy and an expansion plan for an entrepreneurial firm.

COURSE PREREQUISITES DBC 505 (Int'l Business Challenge) and ENT 601 (Entrepreneurship)

COURSE RESOURCES



Textbook: *International Entrepreneurship: Starting, Developing, and Managing a Global Venture* (3rd ed., 2015), by Robert D. Hisrich

Additional Reading Materials (samples)

- Andersson, S. (2011). International Entrepreneurship, Born Globals and the Theory of Effectuation. *Journal of Small Business and Enterprise Development*, 18 (3): 627-643.
- Autio, E. (2005) Creative Tension: The Significance of Ben Oviatt's and Patricia McDougall's Article "Toward a theory of international new ventures". *Journal of International Business Studies*, 36: 9-19.
- Oviatt, B.M. and McDougall, P.P. (1994) Toward a Theory of International New Ventures. *Journal of International Business Studies*, 25: 45-64.
- Zahra, S.A. (2005) A Theory of International New Ventures: A Decade of Research. *Journal of International Business Studies*, 36: 20-28.

Case Studies

In the textbook, supplemented by HBS cases

Videos

TBD

Applied Team Project. This project is the heart of the course, providing students first-hand experience of developing an international expansion strategy for an entrepreneurial firm (the client) in the Central Florida region. The client will meet with the student team in Week 1 to provide an overview of why and how the firm was created, its main products/services, and the client's motivation for taking the firm international. Over the next several weeks, the client will be available to answer questions from the student team and provide the students with any necessary data (- a non-disclosure agreement will be required). Student teams will give an interim presentation to the class in Week 4, to share which target foreign markets they have identified and why. A final written report and oral presentation with the student team's recommendations will be given to the client in Week 8, with immediate feedback provided by the client.

Case Presentation. Each team will analyze and prepare a comprehensive presentation on one of the cases discussed in class. The presentation is due on the date that the case is discussed in class.

Case Briefs. Each case brief is a 1-page, single-spaced report on the case, focusing on presenting a clear recommendation for action, with a detailed justification, and an implementation plan with measurable goals. This is strictly an individual assignment.

Assessment

Assignment	% of Grade
Team Project	30%
Team Project Presentation	15%
Team Case Presentation	20%
Case Briefs (3 x 5%-- Pass/Fail)	15%
Constructive Engagement	20%

GRADING

A	93-100%
A-	90-92%
B+	87-89%
B	83-86%
B-	80-82%
C+	77-79%
C	73-76%
C-	70-72%
F	Below 70%

CRUMMER ACADEMIC INTEGRITY POLICY

As stated in the *Crummer School of Business Academic Integrity Policy*, faculty, students and staff are expected to uphold the highest level of ethical standards. This course requires that all students meet expectations of scholastic honesty, particularly while taking exams. During in-class exams, you may not share any information, materials or electronic files with others. Collusion or cheating in any form will not be tolerated. Failure to abide by these standards will result in full punishment as prescribed by the *Policy*.

SPECIAL ACCOMMODATIONS

Rollins College is committed to equal access and does not discriminate unlawfully against persons with disabilities in its policies, procedures, programs or employment processes. The College recognizes its obligations under the Rehabilitation Act of 1973 and the Americans with Disabilities Act of 1990 to provide an environment that does not discriminate against persons with disabilities.

If you are a person with a disability on this campus and anticipate needing any type of academic accommodations in order to participate in your classes, please make timely arrangements by disclosing this disability in writing to the Disability Services Office at (box 2613) - Thomas P. Johnson Student Resource Center, 1000 Holt Ave., Winter Park, FL, 32789. Appointments can be scheduled by calling 407-646-2354 or email: gmoskola@rollins.edu.

TENTATIVE CLASS SCHEDULE

WEEK OF	CHAPTERS	TOPICS AND OTHER READINGS	ASSIGNMENTS
1	1,2	Intro to <i>Int'l Entrepreneurship</i> International new ventures and "born global" firms	Presentations/project description by local entrepreneurs. Team assignments.
2	3,4	Culture and Int'l Business The Int'l Monetary System & Sources of Funds	Guest speaker: Venture capitalist Case study (TBD)
3	5	Creating / Exploiting Opportunities	Guest speaker: CEO, Genicon (?) <i>How Genicon entered the EU market</i>
4	6, 7	Developing the Global Business Plan Legal Concerns	Case study (TBD)
5	8	Interim team presentations Alternative Entry Strategies	Case study (TBD)
6	9,10	Global Marketing and R&D Global HRM	Case study (TBD)
7	11	Implementing/Managing a Global Entrepreneurial Strategy	Guest speaker Case study
8		Team Project Presentations to Client	